ARIZONA GAME AND FISH DEPARTMENT HERITAGE DATA MANAGEMENT SYSTEM

Plant Abstract Element Code: <u>PDSCR1L7L0</u>

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: Penstemon ramosus

COMMON NAME: Branching Penstemon, Branching Beardtongue, Lanceleaf Beardtongue.

Lanceleaf Penstemon

SYNONYMS: *Penstemon pauciflorus* Greene, *Penstemon lanceolatus* Benth.

FAMILY: Scrophulariaceae

AUTHOR, PLACE OF PUBLICATION: Crosswhite, F. 1966. Sida 2 (4):339-346.

TYPE LOCALITY: New Mexico: "Bluffs of the Rio Gila".

TYPE SPECIMEN: GH. E. L. Greene. 30 August 1880.

TAXONOMIC UNIQUENESS: The Genus *Penstemon* contains approximately 250 species. This is a North American genus, with most species occurring in western North America (Hickman 1993). There are currently 50 species of *Penstemon* known from Arizona (Lehr 1978, Lehr and Pinkava 1980, Lehr and Pinkava 1982). *Penstemon ramosus* belongs to the section Chamaeleon. This section is separated from other sections of *Penstemon* by the peculiarly flattened and twisted anther sacs, which are usually sharply toothed or stoutly hispid at the suture (Crosswhite 1966). According to Kartesz (1994) *Penstemon ramosus* has been misidentified as *Penstemon lanceolatus*. *Penstemon lanceolatus* is otherwise a Mexican species. Kartesz (1999) recognizes *Penstemon ramosus* as distinct.

DESCRIPTION: Robust heterophyllous perennials from a woody caudex; stems 30-75 cm tall, puberulent, often branching midway up the stem; leaves of the branches linear, about 1 mm wide and 25 mm long; leaves of the main stem 3-6 mm wide and 6-11 cm long, isophyllous among themselves, narrowly linear-lanceolate, moderately puberulent, involute; inflorescence moderately to densely glandular-pubescent, a modified cyme with only one branch at a node, this bearing one or two flowers; corollas straight, ranging from scarlet to orange to dark red, 28-40 mm long; anther sacs opening almost throughout, twisted, no at all explanate, the sutures not toothed; capsules 9-15 mm long, 4-valved, the lobes widely divaricate with dehiscence: seeds approximately 3 mm long (Crosswhite 1966, Kearney and Peebles 1960, Rickett 1970).

AIDS TO IDENTIFICATION: Penstemon ramosus can be distinguished from the other species of *Penstemon* in the section Chamaeleon by its combination of red corollas, stems which branch below the inflorescence, and revolute leaves. The species of *Penstemon* in the

section Chamaeleon differ from other *Penstemon* spp. by having peculiarly flattened and twisted anther sacs, which are usually sharply toothed or stoutly hispid at the suture (Crosswhite 1966, Kearney and Peebles 1960).

ILLUSTRATIONS: Color photo (Rickett 1970).

Photo at US?, Peebles #5847.

Color photo (Todsen *in* http://nmrareplants.unm.edu/reports/penram.htm).

TOTAL RANGE: Southwestern New Mexico and southeastern Arizona.

RANGE WITHIN ARIZONA: Cochise County: Chiricahua Mountains; Graham County: Pinaleno Mountains; Greenlee County: northwest of Clifton; and possibly the Santa Rita Mountains (Pima or Santa Cruz counties).

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Deciduous forb perennial.

PHENOLOGY: May-June[-September?].

BIOLOGY:

HABITAT: Rocky mountain canyons at middle elevations.

ELEVATION: Approximately 4,000-5,600 feet (1200-1680 m).

EXPOSURE: North and northeast facing gravelly slopes.

SUBSTRATE: Gravelly slopes.

PLANT COMMUNITY: Specimens from Arizona were taken from disclimax semidesert grassland/upper Chihuahuan desertscrub communities, as described by Brown (1994). Associated species in the Pinaleno Mountains included *Acacia sp.*, *Prosopis sp.*, *Dasylirion wheeleri*, and *Fouquieria splendens*.

POPULATION TRENDS:

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None **STATE STATUS:** None

OTHER STATUS: Forest Service Sensitive (USDA, FS Region

3 1999)

MANAGEMENT FACTORS: Several known locations are on private land, where protection is virtually non-existent. The location northwest of Clifton, Arizona may have already been destroyed by mining activities.

CONSERVATION MEASURES TAKEN: None

SUGGESTED PROJECTS: The last known specimens of *Penstemon ramosus* taken in Arizona were collected around 1975. Surveys should be performed in the known range of *P. ramosus* to better understand the distribution of this species and to determine whether or not this species is still present in the areas where it was collected. According to NatureServe, the status of this species is uncertain due to taxonomic disagreement. Resolution of this taxonomic divergence in opinion is needed before a precise global rank can be determined.

LAND MANAGEMENT/OWNERSHIP: In Arizona: United States Forest Service: Coronado National Forest (Safford (and probably Douglas) Ranger Districts); Private; National Park Service: Fort Bowie National Historic Site; State Land Department. Land ownership in New Mexico and Mexico unknown.

SOURCES OF FURTHER INFORMATION

REFERENCES:

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- Kearney, T.H., R.H. Peebles with collaborators. 1960. Arizona flora. Second edition with supplement by J.T. Howell, E. McClintock and collaborators. University of California Press. Berkeley. pp. 768-771.
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MAJOR KNOWLEDGEABLE INDIVIDUALS:

ADDITIONAL INFORMATION:

This species is either really rare in Arizona, or it is very under-collected.

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